

RAW SEQUENCE LISTING

**The Biotechnology Systems Branch of the Scientific and Technical
Information Center (STIC) no errors detected.**

Application Serial Number: 10/091, 333 A
Source: IFW16
Date Processed by STIC: 12/19/2005

ENTERED



IFW16

RAW SEQUENCE LISTING

DATE: 12/19/2005

PATENT APPLICATION: US/10/091,333A

TIME: 15:13:57

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12192005\J091333A.raw

3 <110> APPLICANT: EINAT, Paz
 4 SKALITER, Rami
 6 <120> TITLE OF INVENTION: HYPOXIA-REGULATED GENES
 8 <130> FILE REFERENCE: EINAT=1.1D
 10 <140> CURRENT APPLICATION NUMBER: 10/091,333A
 11 <141> CURRENT FILING DATE: 2002-03-06
 13 <150> PRIOR APPLICATION NUMBER: US 09/604,978
 14 <151> PRIOR FILING DATE: 2000-06-28
 16 <150> PRIOR APPLICATION NUMBER: US 09/138,112
 17 <151> PRIOR FILING DATE: 1999-08-21
 19 <150> PRIOR APPLICATION NUMBER: US 60/056,453
 20 <151> PRIOR FILING DATE: 1997-08-21
 22 <160> NUMBER OF SEQ ID NOS: 13
 24 <170> SOFTWARE: PatentIn version 3.3
 26 <210> SEQ ID NO: 1
 27 <211> LENGTH: 1754
 28 <212> TYPE: DNA
 29 <213> ORGANISM: Rattus norvegicus
 31 <400> SEQUENCE: 1

32 ccccccggggg aggtgcgaga gggctggaaa ggacaggtcc gggcagcgat cggggggttg 60
 34 catcagttcg ctcacccttc gagaggcaga tcgctcttgt ccgcaatctt cgctgaccgc 120
 36 gctagctgcg gcttctgtgc tccttcgccg aacctcatca accagcgtcc tggcgtctga 180
 38 cctcgccatg cctagccttt gggatcgttt ctgcctctcc tcttctctt cgtcctcgtc 240
 40 ccgaactccg gccgctgac gcccgcccg ctccgcctgg gggctgctgg ccagagaaga 300
 42 gggccttgac cgctgcgcga gcctggagag ctccgactgc gagtccctgg acagcagcaa 360
 44 cagtggcttt gggccggagg aagactctc atacctggat ggggtgtctc tgctgactt 420
 46 tgagctgtc agtgaccccg aggatgagca cctgtgtgcc aacctgatgc agctgctgca 480
 48 ggagagcctg tcccaggcgc gattgggctc gcggcgccct gcgcgcctgc tgatgccgag 540
 50 ccagctgttg agccaggtgg gcaaggaact cctgcgcctg gcgtacagcg agccgtgcgg 600
 52 cctgcggggg gcaactgctg acgtctgtgt ggagcaaggc aagagctgcc atagtgtggc 660
 54 tcagctggct ctggacccca gtctagtgcc cacctttcag ttgaccctgg tgctgctct 720
 56 ggactctcgc ctctggccca agatccaggg cctgttgagt tctgccaaact cttccttggt 780
 58 ccctggttac agccagtccc tgacgctgag caccggcttc agagtcacatc aaaagaaact 840
 60 ctacagctcc gagcagctgc tcattgaaga gtgttgaaact tcgtcctgga ggggggcccgc 900
 62 actgcccccc aaagtggaga caaggaattt ctgtggtgga gaccgcagg caaggactga 960
 64 aggactgtcc cctgtgttag aaaactgaca atagccaccg gaggggcgca gggccagggtg 1020
 66 ggagaaggaa gtgtgttcca ggaagtctc aggtgtgtg caggtggccc cctgttgagg 1080
 68 cacatgcccc tcagtactgt agcatgaaac aaaggcttcg gagccacaca ggcttctggc 1140
 70 tggatgtgta tgtagcatgt atcttattaa tttttgtatt actgacaagt tacaacagca 1200
 72 gttgtgggccc agagtcagaa gggcagctgg tctgcaactgg cctctgcccg ggctgtgtgc 1260
 74 tggggggagg cggggggagg tctccgacag tttgtcgaca gatctcatgg tctgaaagga 1320
 76 ccgagcttgt tcgtcgtttg gtttgtatct tgttttgggg gtgggggtggg gggatcggag 1380
 78 cttcactact gacctgttcg aggcagctat cttacagact gcatgaatgt aagaatagga 1440

Cp9-6)

RAW SEQUENCE LISTING

DATE: 12/19/2005

PATENT APPLICATION: US/10/091,333A

TIME: 15:13:57

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12192005\J091333A.raw

```

80 aggggggtggg tgtaggatc atttgggatc ttcaacactt gaaacaaaat aacaccaggg 1500
82 agctgcatcc cagcccatcc cggtgccggt gtactggagg agtgaactgt gaggggatgg 1560
84 ggctgagggg ggtggggggc tggaaccctc tccccagag gagcgccacc tgggtcttcc 1620
86 atctagaact gtttacatga agatactcac ggttcatgaa tacacttgat gttcaagtac 1680
88 taagacctat gcaatatatt tacttttcta ataaacatgt ttgttaaac aaaaaaaaaa 1740
90 aaaaaaaaaa aaaa 1754
93 <210> SEQ ID NO: 2
94 <211> LENGTH: 1782
95 <212> TYPE: DNA
96 <213> ORGANISM: Homo sapiens
98 <400> SEQUENCE: 2
99 tttggccctc gaggccaaga attcggcacg agggggggag gtgcgagcgt ggacctggga 60
101 cgggtctggg cggctctcgg tggttggcac ggggtcgcac acccattcaa gcggcaggac 120
103 gcacttgtct tagcagttct cgctgaccgc gctagctgcg gcttctacgc tccggcactc 180
105 tgagttcatc agcaaacgcc ctggcgctctg tcctcaccat gcctagcctt tgggaccgct 240
107 tctcgtcgtc gtccacctcc tcttcgccct cgtccttgcc ccgaactccc accccagatc 300
109 ggccgccgcg ctacgcctgg gggtcggcga cccgggagga ggggtttgac cgtccacga 360
111 gcctggagag ctcgactgc gagtccctgg acagcagcaa cagtggcttc gggccggagg 420
113 aagacacggc ttacctggat ggggtgtcgt tgcccgactt cgagctgctc agtgacctg 480
115 aggatgaaca cttgtgtgcc aacctgatgc agctgtgca ggagagcctg gccaggcgc 540
117 ggctgggctc tcgacgcctc gcgcgcctgc tgatgcctag ccagttggta agccaggagg 600
119 gcaaagaact actgcgcctg gcctacagcg agccgtgcgg cctgcggggg gcgctgctgg 660
121 acgtctgctg ggagcagggc aagagctgcc acagcgtggg ccagctggca ctcgacccca 720
123 gcctggtgcc caccttccag ctgacctcgc tgctgcgcct ggactcacga ctctggccca 780
125 agatccaggg gctgtttagc tccgccaaact ctcccttcc cctggcttc agccagtcct 840
127 tgacgctgag cactggcttc cgagtcacga agaagaagct gtacagctcg gaacagctgc 900
129 tcattgagga gtgttgaact tcaacctgag ggggccgaca gtgccctcca agacagagac 960
131 gactgaactt ttgggggtga gactagaggc aggagctgag ggactgattc ctgtggttgg 1020
133 aaaactgagg cagccaccta aggtggaggt gggggaatag tgtttcccag gaagctcatt 1080
135 gagttgtgtg cgggtggctg tgcattgggg acacataccc ctgagtactg tagcatgaaa 1140
137 caaaggctta ggggccaaca aggcttccag ctggatgtgt gtgtagcatg taccttatta 1200
139 tttttgttac tgacagttaa cagtgggtgtg acatccagag agcagctggg ctgctcccgc 1260
141 cccagcccgg cccagggtga aggaagaggc acgtgtcctc cagagcagcc ggagggaggg 1320
143 gggaggtcgg aggtcgtgga ggtggtttgt gtatcttact ggtctgaagg gaccaagtgt 1380
145 gtttgtgtgt tgttttgtat cttgtttttc tgatcgagc atcactactg acctgttga 1440
147 ggcagctatc ttacagacgc atgaatgtaa gtaggaag ggggtgggtgt cagggatcac 1500
149 ttgggatctt tgacacttga aaaattacac ctggcagctg cgtttaagcc ttccccatc 1560
151 gtgtactgca gagttgagct ggcaggggag gggctgagag ggtgggggct ggaaccctc 1620
153 cccgggagga gtgccatctg ggtcttccat ctagaactgt ttacatgaag ataagatact 1680
155 cactgttcat gaatacactt gatgttcaag tattaagacc tatgcaatat tttttacttt 1740
157 tctaataaac atgtttgtta aaacaaaaaa aaaaaaaaaa aa 1782
160 <210> SEQ ID NO: 3
161 <211> LENGTH: 1900
162 <212> TYPE: DNA
163 <213> ORGANISM: Rattus norvegicus
165 <400> SEQUENCE: 3
166 ccacccctca taggactaat tataggggtg gggggggccgc cccccaggt tcgagtggcg 60
168 atggggccgc gctggggctt gctcgtcgga ctcttggcg tcgtgtggct gctcgggtcg 120
170 ggccagggcg aggagcagca gcaggagaca gcggcacagc ggtgtttctg tcaggttagt 180

```

RAW SEQUENCE LISTING

DATE: 12/19/2005

PATENT APPLICATION: US/10/091,333A

TIME: 15:13:57

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12192005\J091333A.raw

```

172 ggttacctgg atgactgtac ctgtgatgtc gagaccatcg ataagtttaa taactacaga      240
174 cttttcccaa gactacaaaa gctccttgaa agtgactact ttagatacta caaggtaaac      300
176 ttgaggaagc catgtccttt ctggaatgac atcaaccaat gtggaagaag agactgtgct      360
178 gtcaaaccct gccatttctga tgaagtccct gatggaatta agtctgcgag ctacaagtat      420
180 tccaaggaag ccaacctcct tgaggagtgt gagcaggctg agcggctcgg agcagtggac      480
182 gaatctctga gtgaggagac ccagaaggct gttcttcagt ggacgaaaca cgatgattct      540
184 tcagacagct tctgtgaagt tgatgacata cagtcccccg atgctgagta tgtggattta      600
186 ctccttaacc ctgagcgcta cacaggctac aagggggccgg acgcttggag gatatggagt      660
188 gtcattctatg aagaaaactg ctttaagcca cagacaattc aaaggccttt ggcttcgggg      720
190 caaggaaaac ataaagagaa cacattttac agctggctag aaggcctctg tgtagaaaag      780
192 agagcattct acaggcttat atctggccta cacgcaagca tcaatgtaca tttgagtgca      840
194 aggtatcttt tacaagataa ttggctggaa aagaaatggg gtcataatgt cacagagttt      900
196 cagcagcgct ttgatggggt tttgacagaa ggagaaggcc ccaggaggct gaagaacctg      960
198 tactttcttt acctgataga gttaagggtt ctctctaaag tgcttccgtt ttcgagcgc     1020
200 ccagattttc agctcttcac tggaaataaa gttcaggatg tggaaaacaa agagttactt     1080
202 ctggagattc ttcattgaagt caagtcattt cctttgcatt ttgatgagaa ttcttttttt     1140
204 gcgggggata aaaacgaagc acataagcta aaggaggact tccgcctaca ctttagaaac     1200
206 atctcgagga tcatggactg cgtcggctgc ttcaagtgcc gcctgtgggg caagcttcag     1260
208 actcagggtc tgggcactgc tctgaagatc ttgttttctg aaaaactgat cgcaaatatg     1320
210 cccgaaagcg gaccagtta tgaattccag ctaaccagac aagaaatagt gtcgttggtc     1380
212 aatgcattcg gaaggatttc cacaagtgtg agagaattag agaacttcag acaactgtta     1440
214 cagaatgttc actgaggagg gcggctggaa cctgcttgtt tctgcacagg ggagtccaga     1500
216 gggcagaatg tctgagcacg gtgattgcag tgaccgtcct gagccaaacg ttcatatcaa     1560
218 gctgcctttg tcaaaggaga gatacattgt ttttaagtaa tgacattttt aaacattgtg     1620
220 ttcattgttt atattattgt gaataaaagt agtatttttg taatgtacaa attttaatac     1680
222 taagcaaaaag taaggtcatt aaattgccct atgatggggg tggggattta gctcagtggg     1740
224 agagctcttg cctaggaagc gcaaggccct ggggttcgggc cccagctccg aaaaaaaaaga     1800
226 accccccccc caaaaaaaat tgcccccata aaaagggtag gtgaatcctg cccagggtc     1860
228 tccacctaaa tttttttttg aaaacttttt tcccccaagg                    1900

```

231 <210> SEQ ID NO: 4

232 <211> LENGTH: 4121

233 <212> TYPE: DNA

234 <213> ORGANISM: Rattus norvegicus

237 <220> FEATURE:

238 <221> NAME/KEY: misc_feature

239 <222> LOCATION: (16)..(17)

240 <223> OTHER INFORMATION: n is any nucleotide

242 <220> FEATURE:

243 <221> NAME/KEY: misc_feature

244 <222> LOCATION: (21)..(21)

245 <223> OTHER INFORMATION: n is any nucleotide

247 <220> FEATURE:

248 <221> NAME/KEY: misc_feature

249 <222> LOCATION: (24)..(25)

250 <223> OTHER INFORMATION: n is any nucleotide

252 <220> FEATURE:

253 <221> NAME/KEY: misc_feature

254 <222> LOCATION: (30)..(31)

255 <223> OTHER INFORMATION: n is any nucleotide

RAW SEQUENCE LISTING

DATE: 12/19/2005

PATENT APPLICATION: US/10/091,333A

TIME: 15:13:57

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12192005\J091333A.raw

257 <220> FEATURE:
258 <221> NAME/KEY: misc_feature
259 <222> LOCATION: (40)..(40)
260 <223> OTHER INFORMATION: n is any nucleotide
262 <220> FEATURE:
263 <221> NAME/KEY: misc_feature
264 <222> LOCATION: (50)..(50)
265 <223> OTHER INFORMATION: n is any nucleotide
267 <220> FEATURE:
268 <221> NAME/KEY: misc_feature
269 <222> LOCATION: (52)..(52)
270 <223> OTHER INFORMATION: n is any nucleotide
272 <220> FEATURE:
273 <221> NAME/KEY: misc_feature
274 <222> LOCATION: (65)..(65)
275 <223> OTHER INFORMATION: n is any nucleotide
277 <220> FEATURE:
278 <221> NAME/KEY: misc_feature
279 <222> LOCATION: (67)..(67)
280 <223> OTHER INFORMATION: n is any nucleotide
282 <220> FEATURE:
283 <221> NAME/KEY: misc_feature
284 <222> LOCATION: (75)..(75)
285 <223> OTHER INFORMATION: n is any nucleotide
287 <220> FEATURE:
288 <221> NAME/KEY: misc_feature
289 <222> LOCATION: (80)..(80)
290 <223> OTHER INFORMATION: n is any nucleotide
292 <220> FEATURE:
293 <221> NAME/KEY: misc_feature
294 <222> LOCATION: (88)..(90)
295 <223> OTHER INFORMATION: n is any nucleotide
297 <220> FEATURE:
298 <221> NAME/KEY: misc_feature
299 <222> LOCATION: (94)..(95)
300 <223> OTHER INFORMATION: n is any nucleotide
302 <220> FEATURE:
303 <221> NAME/KEY: misc_feature
304 <222> LOCATION: (99)..(99)
305 <223> OTHER INFORMATION: n is any nucleotide
307 <220> FEATURE:
308 <221> NAME/KEY: misc_feature
309 <222> LOCATION: (101)..(101)
310 <223> OTHER INFORMATION: n is any nucleotide
312 <220> FEATURE:
313 <221> NAME/KEY: misc_feature
314 <222> LOCATION: (106)..(106)
315 <223> OTHER INFORMATION: n is any nucleotide
317 <220> FEATURE:

RAW SEQUENCE LISTING

DATE: 12/19/2005

PATENT APPLICATION: US/10/091,333A

TIME: 15:13:57

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12192005\J091333A.raw

318 <221> NAME/KEY: misc_feature
319 <222> LOCATION: (117)..(117)
320 <223> OTHER INFORMATION: n is any nucleotide
322 <220> FEATURE:
323 <221> NAME/KEY: misc_feature
324 <222> LOCATION: (119)..(119)
325 <223> OTHER INFORMATION: n is any nucleotide
327 <220> FEATURE:
328 <221> NAME/KEY: misc_feature
329 <222> LOCATION: (122)..(122)
330 <223> OTHER INFORMATION: n is any nucleotide
332 <220> FEATURE:
333 <221> NAME/KEY: misc_feature
334 <222> LOCATION: (125)..(125)
335 <223> OTHER INFORMATION: n is any nucleotide
337 <220> FEATURE:
338 <221> NAME/KEY: misc_feature
339 <222> LOCATION: (128)..(129)
340 <223> OTHER INFORMATION: n is any nucleotide
342 <220> FEATURE:
343 <221> NAME/KEY: misc_feature
344 <222> LOCATION: (133)..(133)
345 <223> OTHER INFORMATION: n is any nucleotide
347 <220> FEATURE:
348 <221> NAME/KEY: misc_feature
349 <222> LOCATION: (138)..(138)
350 <223> OTHER INFORMATION: n is any nucleotide
352 <220> FEATURE:
353 <221> NAME/KEY: misc_feature
354 <222> LOCATION: (141)..(141)
355 <223> OTHER INFORMATION: n is any nucleotide
357 <220> FEATURE:
358 <221> NAME/KEY: misc_feature
359 <222> LOCATION: (147)..(147)
360 <223> OTHER INFORMATION: n is any nucleotide
362 <220> FEATURE:
363 <221> NAME/KEY: misc_feature
364 <222> LOCATION: (164)..(164)
365 <223> OTHER INFORMATION: n is any nucleotide
367 <220> FEATURE:
368 <221> NAME/KEY: misc_feature
369 <222> LOCATION: (167)..(167)
370 <223> OTHER INFORMATION: n is any nucleotide
372 <220> FEATURE:
373 <221> NAME/KEY: misc_feature
374 <222> LOCATION: (1375)..(1375)
375 <223> OTHER INFORMATION: n is any nucleotide
377 <220> FEATURE:
378 <221> NAME/KEY: misc_feature

RAW SEQUENCE LISTING ERROR SUMMARY
PATENT APPLICATION: US/10/091,333A

DATE: 12/19/2005
TIME: 15:13:58

Input Set : A:\sequence listing.txt
Output Set: N:\CRF4\12192005\J091333A.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220>

to <223> fields of each sequence which presents at least one n or Xaa

Seq#:4; N Pos. 16,17,21,24,25,30,31,40,50,52,65,67,75,80,88,89,90,94,95,99
Seq#:4; N Pos. 101,106,117,119,122,125,128,129,133,138,141,147,164,167,1375
Seq#:4; N Pos. 1384,1389,1402,1413,1457,1472,1488,1493,1497,1499,1963,2250
Seq#:4; N Pos. 2278,2282,4102,4106
Seq#:11; Xaa Pos. 307,310,312,316,320,345,346,348,503,599,608,609

VERIFICATION SUMMARY

DATE: 12/19/2005

PATENT APPLICATION: US/10/091,333A

TIME: 15:13:58

Input Set : A:\sequence listing.txt

Output Set: N:\CRF4\12192005\J091333A.raw

L:458 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:0
L:460 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:60
L:462 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:120
L:502 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1320
L:504 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1380
L:506 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1440
L:522 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:1920
L:532 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:2220
L:534 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:2280
L:594 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4 after pos.:4080
L:1287 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:304
L:1295 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:336
L:1335 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:496
L:1359 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:592
L:1363 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11 after pos.:608